REMARKS

Claims 13-28 were examined and rejected. Claims 1-12 have been previously withdrawn, and are cancelled herein. Applicants amend no claims. Applicants submit additional claims 29-34, and submit that no new matter is added herein. Additional claims 29 and 31 are supported at least by claim 1 as filed. Additional claims 30 and 32 are supported at least by claim 1 as filed, paragraphs [0026] and [0039]-[0041], and Figure 5 of the application. Additional claims 33 and 34 are supported at least by paragraphs [0026] and [0039]-[0041], and Figures 2-4B of the application.

Hence, Applicants respectfully request reconsideration of the pending claims and consideration of the additional claims.

I.   Claims Rejected Under 35 U.S.C. § 103

Claims 13-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of U.S. Patent No. 7,295,639 to Cory (Cory) and further in view of U.S. Patent Publication No. 2002/0112099 to Collier (Collier). For a claim to obvious, every limitation of that claim must be taught by at least one properly combined reference.

Applicants respectfully disagree with the rejection of claim 13 for at least the reason that the cited reference do not teach control logic to stall a read pointer and generate a second non-data symbol in response to a first, predetermined non-data symbol <u>appearing at an output</u> of one of the plurality of <u>deskew buffers</u>, as required by claim 13.

As noted by the Patent Office, neither AAPA nor Cory discloses the above-noted limitations. Moreover, Collier teaches deskew <u>controller</u> 280 starting and stopping output from the buffers 261-272 using a control line (<u>see</u> Figure 1 and paragraph [0017]). Consequently, the cited references do not teach the above-noted limitations of claim 13.

In addition, Applicants disagree with the rejection above of claim 13 for at least the reason that the cited references do not teach generating an instance of a second non-data symbol at an output of the deskew circuitry, as required by claim 13.

The Patent Office cited a training sequence of Collier against the above-noted limitation. However, Collier teaches that lanes are instructed to simultaneously send a recognizable training sequence to deskew buffers 261-272 in order to remove any skew (see Figure 1 and paragraph [0017]). Consequently, the Patent Office has not identified and Applicants are unable to find any teaching of the above-noted limitations of claim 13 in the cited references.

In addition to be dependent upon allowable base claim 13, Applicants disagree with the rejection above of dependent claim 16 for at least the reason that the cited references do not teach control logic to, in response to detecting that a first instance of a non-data symbol is followed by an instance of a second non-data symbol that are to be loaded into one of the plurality of deskew buffers, generate a second non-data symbol at an output of the deskew circuitry through which the buffered symbol sequence for said another deskew buffer is forwarded, as required by claim 16.

As noted above, the cited references do not teach detecting non-data symbols to be loaded into deskew buffers, or generating non-data symbols at outputs of circuitry through which the buffered symbol sequences are forwarded. Hence, in addition to not teaching claim 13, the references also do not teach the detecting and generating of claim 16.

Next, Applicants disagree with the rejection of independent claim 19 for at least the reason that the cited reference do not teach control logic to, in response to a first instance of a non-data symbol appearing at an output at one of the polarity of deskew buffers, generate an instance of a second non-data symbol at an output of the deskew circuitry through which the buffered symbol sequence is forwarded, as required by claim 19.

An argument analogous to the one above for claim 13 applies here as well.

In addition to being dependent upon allowable base claim 19, Applicants disagree with the rejection of claim 28 for at least the reason that the cited reference do not teach the control

logic to, in response to the indication that a predetermined non-data symbol is about to be loaded into a deskew buffer, generate an instance of a second non-data symbol at an output through which the buffered symbol sequence is forwarded, as required by claim 28 (and interceding claim 23).

An argument analogous to the one above for claim 16 applies here as well.

Each of claims 16 and 28 requires <u>a first non-data symbol as well as a second non-data symbol be used in a first deskew process to align instances of the first non-data symbol in data lanes, and be used in a second deskew process to equalize the number of instances of the second non-data symbol following an instance of the first non-data symbol in the data lanes</u>. Thus claims 16 and 28 require the two-part process of the present invention which provides a lane-to-lane deskewing method for a serial point-to-point link, achieved via non-data symbol processing and involving a two-part deskew process. The <u>first part</u> aligns an instance of the first non-data symbol (which may be a PCI Express COM) in every one of the buffered symbol sequences of the link, and the <u>second part</u> equalizes the number of instances of the second non-data symbol (which may be a PCI Express SKP) that follow an instance of the first non-data symbol (in every one of the symbol sequences).

Referring, for example, to Applicant's claim 16, this claim recites a device for lane-to-lane deskewing, wherein *skew between a plurality of buffered symbol sequences is reduced by inserting an instance of **a second, different non-data symbol** into the buffered symbol sequences **immediately preceding, or immediately following, an instance of the first non-data symbol**.* Note the difference between a *data symbol* and a *non-data symbol* (*e.g.* see Applicant's Specification paragraph [0028]). See Applicant's Specification paragraphs [0032]-[0033] for example explanations of why a second, different non-data symbol may be inserted **immediately preceding** an instance of the first non-data symbol during training of a data lane. Next, see Applicant's specification paragraphs [0043]-[0047] for example explanations of why, <u>after training</u>, a second different non-data symbol may be inserted **immediately following** an instance of the first non-data symbol.

Specifically, by performing the first part deskew process during training, and then performing the second deskew part as claimed, <u>unexpected results or effects</u> accomplished may include: (1) <u>managing an elastic buffer to avoid overflow and underflow conditions</u> by controlling data lane elastic buffer read and write pointers during the first and second deskewing parts (see at least paragraphs [0026]-[0027] and [0037] of the application); and (2) equalizing the numbers of instances of the second non-data symbol in every one of the buffer output symbol sequences <u>so that an unequal number of the second non-data symbols does not cause an additional source of skew</u> in the data between lanes during the second deskewing part (see paragraphs [0032] and [0043]-[0049] and FIGs. 6A and B of the application); (3) so that data routed to a computer form various sources (e.g. the internet word processing, email, an audio card, a video stream, etc.) can be <u>experienced by a user, or assembled without glitches, skips, or stalls</u> (see paragraphs [0051]-[0052] and FIG. 7 of the application). However, none of the references D1-D2 describe or enable such unexpected effects or benefits.

Any dependent claims not mentioned above are submitted as being allowable for at least the reasons given for their base claims as well as additional limitations of those dependent claims.

Thus, Applicants respectfully request all of the rejections above be withdrawn.

II.   <u>Additional Claims 29-34</u>

Applicants submit that additional claims 29-34 are patentable for at least the reasons provided above in support of their base claims, as well as the additional limitations of those claims.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending (1) are in proper form, (2) are neither obvious nor anticipated by the relied upon art of record, and (3) are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

PETITION FOR EXTENSION OF TIME

Per 37 C.F.R. 1.136(a) and in connection with the Office Action mailed on December 11, 2008, Applicants respectfully petition Commissioner for a one (1) month extension of time, extending the period for response to April 11, 2009. The amount of $130.00 to cover the petition filing fee for a 37 C.F.R. 1.17(a)(1) large entity will be charged to our Deposit Account No. 02-2666.

Respectfully submitted,

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Dated: 04/01/09

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CERTIFICATE OF TRANSMISSION
I hereby certify that this correspondence is being submitted electronically via EFS Web on the date shown below to the United States Patent and Trademark Office.

04/01/09

Jessica Huester   Date